

the U. S. Federal Highway Administration in June of 1961 and any amendments or revisions thereof as may be made from time to time.

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic. At the end of each day's work or when construction operations are suspended for any reason, the Contractor shall remove all obstructions to the free and safe passage of public traffic.

4.5 CONSTRUCTION AND MAINTENANCE OF DETOURS—The Contractor shall construct and maintain detours for the use, convenience and safety of public traffic. Unless indicated otherwise in the contract, all such work for the use, convenience and safety of public traffic shall be considered incidental to the work of the various pay items of the contract and no additional payment will be allowed therefor.

All detours shall be approved in writing by the Director.

ARTICLE V—CONTROL OF WORK

5.1 AUTHORITY OF THE DIRECTOR—The Director will decide all questions which may arise regarding the quality and acceptability of materials furnished and work performed and the rate of progress of the work, the interpretation of the plans and specifications, the acceptable fulfillment of the contract, and compensation. His estimates and decisions upon all claims, questions and disputes will be final and conclusive.

The Director may enforce in any suitable manner the decisions and orders which the Contractor fails to carry out promptly and diligently.

The Director may, for such periods as he may deem necessary, suspend the work in whole or in part (1) for failure of the Contractor to correct unsafe conditions for the workmen or the general public, carry out provisions of the contract, or carry out orders; and (2) for unsuitable weather, for conditions considered unsuitable for the prosecution of the work, or for any other condition or reason deemed to be in the public interest.

5.2 PLANS AND WORKING DRAWINGS—The plans furnished by the State consist of general drawings and show details necessary to give a comprehensive idea of the construction contemplated. All authorized alterations affecting the requirements and information given on the plans shall be in writing. The Contractor shall keep one set of plans available on the job at all times.

The Contractor shall furnish working drawings for structures which shall consist of the detailed plans required to control the work. The working drawings to be furnished by the Contractor shall include, but not be limited to, stress sheets, anchor bolt layouts, shop details, erection plans, cribs, cofferdams, falsework, centering, form work and other temporary work and methods of construction.

The Contractor shall be responsible for the accuracy of dimensions and details, and for agreement of dimensions and details. He shall be responsible for the agreement and conformity of his working drawings with the plans and specifications.

All working drawings must be approved by the Director and such approval shall not operate to relieve the Contractor of his responsibility under the contract for the successful completion of the work. No change shall be made in any approved working drawings without the written permission of the Director. The contract price includes the cost of furnishing all working drawings and no additional compensation will be allowed therefor.

5.3 CONFORMITY WITH PLANS AND SPECIFICATIONS—The work shall be completed in conformity with the specified values and dimensions set forth in the contract.

However, deviations as may be required by the exigencies of construction which do not affect the performance of the completed work may be allowed by the Director.

During the course of the work, samples may be tested and measurements made to establish whether or not the specified values or dimensions are being met. If the specified values or dimensions are not being met, the Director will determine the degree of the non-conformance, the effect on the serviceability of the project, whether the work will be accepted and remain in place and, if so, the amount to be paid for such work, or whether the work shall be removed and replaced or otherwise corrected at the Contractor's expense.

5.4 FURNISHING AND COORDINATION OF PLANS AND SPECIFICATIONS—The plans, specifications, special provisions, if any, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complimentary and to describe and provide for the complete work. In case of a conflict or discrepancy within a document, the stricter requirement shall govern, unless the Director determines otherwise. In case of dimensional discrepancy, calculated dimensions will govern over scaled dimensions. In case of discrepancy between documents, the plans will govern over specifications; special provisions will govern over both specifications and plans.

The Contractor shall not take advantage of any apparent error or omission in the plans or specifications. In the event the Contractor discovers such an error or omission, he shall immediately notify the Director. The Director will then make such corrections as he deems necessary for fulfilling the intent of the plans and specifications.

The Contractor shall give the work the attention necessary to facilitate the progress thereof, and shall cooperate with the Director, his inspectors, and other contractors in every way possible.

The Contractor shall have on the work at all times, as his agent, a competent superintendent capable of thoroughly understanding the plans and specifications and thoroughly experienced in the type of work being performed. The superintendent shall have full authority to execute orders or directions of the Director without delay, and to promptly supply such materials, equipment, tools, labor and incidentals as may be required. Such superintendence shall be furnished irrespective of the amount of work subcontracted.

5.5 COOPERATION BETWEEN CONTRACTORS—The State reserves the right at any time to contract for or otherwise perform other or additional work on or near the work covered by the contract.

When other State contracts are let within the limits of any one project, the Contractor shall, to the extent ordered by the State, conduct his work so as not to interfere with or hinder the progress or completion of the work being performed by other contractors. Contractors working on the same project shall cooperate with each other as directed.

The Contractor assumes all burdens, financial or otherwise, in connection with his contract and releases the State from any and all liability for damages because of inconvenience, delay, or loss experienced by him because of the presence and operations of other contractors working within the limits of the same project.

The Contractor shall arrange his work and shall place and dispose of the materials being used so as not to interfere with the operations of the other contractors within the limits of the same project. He shall join his work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

5.6 AUTHORITY AND DUTIES OF PROJECT ENGINEER—The project engineer has immediate charge of the engineering details of each construction project. He is responsible

for the administration and satisfactory completion of the project. He is delegated commensurate authority, and he may reject defective material and order the suspension of any work being improperly performed.

5.7 DUTIES OF THE INSPECTOR—Inspectors employed by the State are authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The inspector may not alter or waive the provisions of the contract, issue instructions contrary to the plans and specifications, or act as foreman for the Contractor.

In the absence of a project engineer, the inspector shall be in charge of the project and assume the duties of the project engineer.

5.8 INSPECTION OF WORK—All materials and each part or detail of the work shall be subject to inspection by the Director. The Director shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

Any time prior to the acceptance of the work, for the purpose of detailed inspection, the Contractor shall remove or uncover such portions of the work as may be directed. After inspection, the Contractor shall restore said portions of the work to the standard required by the specifications. If the work exposed and inspected is acceptable, the uncovering, or removing, and the replacing of the covering or making good of the portions removed will be paid for as extra work; but if the work is unacceptable, the work and making good of the portion removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the State may be ordered removed and replaced at the Contractor's expense unless the said representative failed to inspect the work after being given reasonable notice in writing that the work was to be performed.

The provisions of the preceding paragraphs are not intended to cover sampling, testing and measurement normally performed as a routine procedure by the State.

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contract as prescribed, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such defective work and materials have been previously overlooked and accepted or estimated for payment.

5.9 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK—All work not conforming to the requirements of the contract will be considered unacceptable work.

Unacceptable work caused by poor workmanship, use of defective materials, damage through carelessness or any other cause, and found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner.

Any work done beyond the limits shown on the plans and specifications or established by the Director or any extra work done without written authority will be considered unauthorized and will not be paid for. Unauthorized work may be ordered removed or replaced by the Director at the Contractor's expense.

If the Contractor fails to remedy upon notice a situation caused by unacceptable or unauthorized work, the Director may cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and he may deduct the costs from any monies due or to become due the Contractor.

5.10 MAINTENANCE OF THE WORK—The Contractor shall maintain the work until the project is accepted.

All costs of maintenance during construction and before the project is finally accepted are included in the unit or lump sum prices bid on the various pay items and the Contractor will not be paid an additional amount for such maintenance.

If the Contractor, at any time, fails to properly maintain the work, the Director will notify the Contractor of such non-compliance. If the Contractor fails to properly maintain the work within twenty-four (24) hours after receipt of such notice, the Director may immediately maintain the project, and the entire cost of this maintenance will be deducted from monies due or to become due the Contractor.

5.11 FINAL CLEANING UP—Before final inspection of the work, the Contractor shall clean the project site and other sites used by him in connection with the work. The work shall be left in a neat and presentable condition. Full compensation for final cleaning up is included in the prices paid for the various contract items of work, and no separate or additional payment will be made therefor.

5.12 ACCEPTANCE

A. PARTIAL ACCEPTANCE—If, during the prosecution of the project the Contractor completes a unit or portion of the project, see p. 5-6. If the Director finds that the unit has been substantially completed in compliance with the contract, he may accept that unit or portion of the project as being completed and the Contractor may be relieved of further responsibility for that unit or portion of the project. Such partial acceptance shall in no way void or alter any of the terms of the contract.

B. FINAL ACCEPTANCE—Upon notice from the Contractor of completion of the entire project, the Director will make an inspection. If the contract is found completed to the Director's satisfaction, such inspection shall constitute the final inspection and the Director will notify the Contractor in writing of his acceptance.

If the inspection discloses any unsatisfactory work, the Director will notify the Contractor in writing of the particular items or portions of the work that are unsatisfactorily performed. The Contractor shall immediately remedy the unsatisfactory items or portions of the work. Upon completion of the remedial work, the Contractor shall notify the Director who will make another inspection. If such inspection discloses the work has been satisfactorily completed, the Director will notify the Contractor in writing of the acceptance as of the date of the final inspection. Any unit which becomes damaged by the Contractor through his use thereof shall be repaired, replaced, or restored at his expense to the satisfaction of the Director.

5.13 CLAIMS FOR ADJUSTMENT AND DISPUTES:—If the Contractor deems that additional compensation is due him for work or material not clearly covered in the contract or not ordered by the Director as extra work, as defined herein, the Contractor shall notify the Director in writing of his intention to make claim for such extra compensation ten (10) days before he begins the work on which he bases the claim and shall afford the Director every facility for keeping an accurate account of the actual cost of the work. Failure on the part of the Contractor to give such notification or to afford the Director proper facilities for keeping strict account of actual cost will constitute a waiver of the claim for such additional compensation. The filing of the notice of such claim by the Contractor and the keeping of cost by the Director shall not in any way be construed to establish the validity of the claim. If the Director considers the claim justified, payment will be made as extra work. The provisions of this Section shall not be construed as establishing any claim contrary to the terms of Section 4.3.

5.14 VALUE ENGINEERING—On projects with contract amounts in excess of \$100,000, the following Value Engineering Incentive Clause shall apply to allow the Contractor to share in cost savings that ensue from cost reduction proposals submitted by him.

Value Engineering Incentive Clause

- A. This clause applies to all Value Engineering Change Proposals (cost reduction proposals, hereinafter referred to as "VECP") initiated and developed by the Contractor for changing the drawings, designs, specifications, or other requirements of this contract. This clause does not, however, apply to any VECP unless it is identified as such by the Contractor at the time of its submission to the Director.
- B. All VECP must:
- (1) result in a savings to the State by providing less costly items than those specified herein without impairing any of their essential functions and characteristics such as service life, reliability, economy of operation, ease of maintenance, desired appearance; and
 - (2) require, in order to be applied to this contract, a change order to this contract.
- C. The VECP will be processed expeditiously and in the same manner as prescribed for any other proposal which would likewise necessitate issuance of a contract change order. As a minimum, the following information will be submitted by the Contractor with each proposal:
- (1) a description of the difference between the existing contract requirement and the VECP, and the comparative advantages and disadvantages of each;
 - (2) an itemization of the requirements of the contract which must be changed if the VECP is adopted and a recommendation as to how to make each such change;
 - (3) an estimate of the reduction in performance costs that will result from adoption of the VECP taking into account the costs of implementation by the Contractor, including any amounts attributable to subcontracts, and the basis for the estimate;
 - (4) a prediction of any effects the VECP would have on other costs to the State, such as State-furnished property costs, costs of related items, and costs of maintenance and operation;
 - (5) a statement of the time by which a change order adopting the VECP must be issued so as to obtain the maximum cost reduction during the remainder of this contract, noting any effect on the contract time; and
 - (6) the dates of any previous submissions of the VECP, the numbers of any Government contracts under which submitted and the previous actions by the Government, if known.
- D. The State shall not be liable for any delays in acting upon, or for any failure to act upon any proposal submitted pursuant to this clause. The decisions of the Director as to the acceptance of any VECP under this contract shall be final. Unless and until a change order applies a VECP to this contract, the Contractor shall remain obligated to perform in accordance with the terms of the existing contract. The Director may accept in whole or in part any VECP submitted pursuant to this clause by issuing a change order which will identify the VECP on which it is based.
- E. If a VECP submitted pursuant to this clause is accepted under this contract, an equitable adjustment in the contract price and in any other affected provisions of this contract shall be made in accordance with this clause and the "Changes" clause of this contract. The equitable adjustment shall first be established by determining the effect on the Contractor's cost of performance, taking into account

the Contractor's cost of implementing the change (including any amount attributable to subcontracts). The contract price shall then be reduced by the total estimated decrease in the cost of performance minus fifty percent (50%) of the difference between the amount of such total estimated decrease and any ascertainable costs to the State which must be incurred to apply the VECP to this contract.

- F. Cost reduction proposals submitted under the provisions of any other contract also may be submitted under this contract for consideration pursuant to the terms of this clause.
- G. The Contractor may restrict the right of the State and/or Federal government (hereinafter referred to as "Government") to use any sheet of a VECP or of the supporting data, submitted pursuant to this clause, in accordance with the terms of the following legend if it is marked on such sheet. "This data furnished pursuant to a value engineering incentive clause shall not be disclosed outside the Government, or be duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under said clause. This restriction does not limit the Government's right to use information contained in this data if it is or has been obtained from another source, or is otherwise available, without limitations. If such a proposal is accepted by the State by issuance of a change order under the "Changes" clause of said contract after the use of this data in such an evaluation, the Government shall have the right to duplicate, use and disclose any data pertinent to the proposal as accepted, in any manner and for any purpose whatsoever, and have others so do".

In the event of acceptance of value engineering proposal, the Contractor hereby grants to the Government all rights to use, duplicate or disclose in whole or part, in any manner and for any purpose whatsoever, and to have or permit others to do so, any data reasonably necessary to fully utilize such proposal. Contract modifications made as a result of this clause will state that they are made pursuant to it.

ARTICLE VI—CONTROL OF MATERIAL

6.1 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS—The materials used on the work shall meet all quality requirements of the contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the Director of his proposed sources of materials within ten (10) days after the date of award of the contract on a form furnished by the Department. At the option of the Director, materials may be approved at the source of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products the Contractor shall furnish acceptable materials from other sources.

6.2 NATURAL MATERIAL SOURCES—Possible sources of natural materials may be designated on the plans and described in the specifications. The quality of material in such deposits will be acceptable in general, but the Contractor shall determine for himself the amount of equipment and work required to produce a material meeting the specifications. It is understood that it is not feasible to ascertain from samples the limits of an entire deposit, and that variations are usual and to be expected. The Director may order procurement of material from any portion of a deposit and may reject portions of the deposit as unacceptable.

The State may make available to the Contractor the right to take materials from the sources designated on the plans and described in the specifications, together with the right to use such property as may be specified, for plant site, stockpiles and hauling roads.